

CONTENTS OF MARINE REVIEW, CALENDAR YEAR, 1916

INDEX TO VOL. XLVI



Contents of Marine Review, Calendar Year, 1916

INDEX TO VOLUME XLVI

Accidents to lake vessels during first half of 1916.....	Aug.	281
Accidents to lake vessels from July 1 to Dec. 31, 1915.....	Feb.	60
Achilles and Ulysses, colliers—Data on tests showing sag of vessels at different stages of loading.....	Jan.	14
Admiral Watson—Raising the steamer.....	Jan.	32
After-the-war plans made by England.....	Oct.	353
After-war shipping—Nations prepare for it.....	July	240
Age limit lowered by steamboat inspection service for persons obtaining marine licenses.....	May	177
Agents at Panama—Article from Fairplay giving English viewpoint.....	April	130
Aids to navigation on Great Lakes and St. Lawrence river—List issued by United States lighthouse service.....	July	258
Air tools in shipyards.....	Oct.	370
Aladdin—Steamer is chartered for service between New York and Archangel.....	May	162
Alaska light station—New.....	Nov.	388
Alaska river—Relocating it.....	April	142
Alexander, Joshua W.—Introduces bill urging marine cadet school.....	June	225
Alexander shipping bill—Complete text of.....	March	109
Alliance Machine Co.—Large ship yard cranes.....	Feb.	86
Allies' conference arouses interest.....	May	180
Amazon river boat Yurimaguas makes trip to Pacific.....	Nov.	390
American Brass Co.—Tobin bronze.....	Nov.	406
American-Hawaiian line charters its vessels.....	May	181
American-Hawaiian steamers Artisan and Arborean make initial trips in lumber trade.....	Oct.	352
American-Hawaiian Steamship Co. sells Nebraskan and Nevada.....	March	115
American International Corporation acquires more steamship lines.....	June	210
American International Corporation—Developments of.....	April	152
American International Corporation—Pacific mail steamers re-enter trans-Pacific trade.....	Oct.	350
American International Corporation—Purchases Pacific Mail steamship Co.'s fleet.....	Feb.	81
American International Corporation returns Pacific Mail steamers to Pacific trade.....	Sept.	316
American laws a handicap to steamship operators.....	June	214
American line to get four fast steamers.....	Dec.	431
American Manganese Bronze Co.—Products of.....	Aug.	298
American Manganese Bronze Co.—To manufacture propellers.....	Aug.	298
American merchant marine—Additions to.....	Aug.	297
American merchant marine—A new.....	Feb.	40
American merchant marine—Brief statistical facts pertaining to it.....	July	260
American merchant marine—Discussion by J. J. Donovan.....	Feb.	68
American merchant marine—Employees 188,000 men.....	May	177
American merchant marine—Foreign Trade Council offers prizes for essays on the subject.....	July	234
American merchant marine—Increase shown in proportion of foreign trade carried in American vessels.....	Aug.	276
American merchant marine in need of government aid.....	May	177
American merchant marine—National Foreign Trade Council's report.....	July	243
American merchant marine—Out of proportion to enormous trade of the country.....	Feb.	68
American ports are developed—Bulletin by department of commerce.....	July	249
American registry act of Aug. 18, 1914 extended for one year.....	Nov.	378
American registry for foreign-built ships—President suspends act of Aug. 18, 1914.....	Dec.	438
American registry for foreign ships—Circular on the subject.....	April	143
American registry granted foreign vessels—Table giving list of vessels.....	Feb.	48
American Screw Propeller Co.—Dyson propellers.....	Oct.	362
American Screw Propeller Co.—Installations of Dyson propellers.....	Dec.	442
American Ship Building Co.—Important extensions at Cleveland.....	April	135
American Ship Building Co.—Improvements at its Lorain plant.....	Dec.	432
American Ship Building Co.'s plant at Port Arthur, Canada, sold.....	Dec.	419
American ship building record for two years.....	Aug.	278
American shipping—Protection for.....	Jan.	21
American ship yards lead in vessel construction—Department of commerce statistics.....	July	257
American ship yards regain first rank in ship building industry.....	Sept.	322
American Smelting & Refining Co.—Acquires steamers Republic, Sherman and Potomac.....	July	264
American Smelting & Refining Co.—Buys three large steamships for South American business.....	July	248
American Steamship Association—Discussion of crew question for American vessels.....	Sept.	305
American trade with foreign countries.....	Sept.	324
American Trans-Atlantic Co.—Inquiry regarding protection for American vessels.....	Jan.	21
Anchor and Donaldson lines consolidated.....	Dec.	432
Anchor maneuvers, discussion of—By Captain George S. Laing.....	Nov.	382
Antwerpen, Dutch steamer—Sunk in North Sea.....	Nov.	400
Arabic disaster—Burr & Hardwick file suit against Oceanic Steam Navigation Co.....	Dec.	432
Arborean and Artisan, American-Hawaiian steamers—Make first trips in lumber trade.....	Oct.	352
Arctic Circle—Trading beyond it—By Captain George S. Laing.....	May	171
Argentine battleships Moreno and Rivadavia accepted by government.....	May	174
Arizona, superdreadnought—In commission.....	Dec.	429
Artisan and Arborean, American-Hawaiian steamers—Make maiden trips in lumber trade.....	Oct.	352
Astoria builds new dock.....	April	153
Atlantic, Gulf & West Indies Steamship Lines—Report shows prosperity.....	May	182
Atlantic Transport Co.—Sells its steamers Korea and Siberia to Japanese steamship line.....	July	241
Australian naval authorities—Regulation of shipping.....	Nov.	394
Auxiliary lights—Storage battery for.....	May	176
Auxiliary schooners for Standard Oil Co. building by Toledo Ship Building Co., Description of.....	Dec.	408
Average daily lake freight rates.....	Feb.	71
Average iron ore cargo shipped on the Great Lakes.....	Feb.	70
Average stay in port of Great Lakes vessels.....	Feb.	70
Backing trials—How ships act on them.....	Jan.	27
Baldwin, George J.—Becomes vice-president of American International Corporation.....	April	152
Baltimore Dry Docks & Ship Building Co.—Rapid growth of.....	Oct.	355
Baltimore Dry Docks & Shipbuilding Co.—Reorganization of.....	July	251

Barge canal, New York—Great connecting link to other waterway systems.....	Dec.	430
Barge line established on coast.....	July	241
Barge line—New Hudson.....	Oct.	351
Bath, Me.—Improvements in plants at.....	Dec.	420
Battleship California—Keel is laid.....	Dec.	435
Battleship design—Evolution in—Paper by W. A. Dobson.....	Dec.	424
Battleship Pennsylvania's standardization trials.....	April	125
Battleships Moreno and Rivadavia accepted by Argentine government.....	May	174
Bethlehem Steel Co. orders three additional bulk cargo carriers for foreign ore trade.....	Sept.	320
Bids for vessel on naval program opened.....	Dec.	437
Blackmer Rotary Pump Co.—Operations of.....	March	121
Blue Bee Line—Barge line inaugurated on coast.....	July	241
Boiler tests—Paper by Lieut. S. M. Robinson.....	Aug.	268
Bolinder oil engines.....	Nov.	406
Bolinders Co.—Engines.....	April	157
Boston Chamber of Commerce committee makes report on delays in survey work by U. S. coast and geodetic survey owing to lack of funds.....	Aug.	286
Boston light—200 years old.....	Nov.	389
Boyd's Ltd.—To erect new shipyard at Port Moody, B. C.....	July	258
Brake tests in a model tank—By Capt. Wm. Strother Smith.....	Jan.	25
Brazilian government aids shipping interests.....	Nov.	398
Brazilian trade—Steamships engaged in.....	Oct.	350
Bridge disaster at Quebec.....	Nov.	379
British admiralty pays charterer money for vessels requisitioned.....	Jan.	20
British admiralty releases Canadian Pacific liners.....	Jan.	28
British and American legislation governing crews of vessels contrasted.....	Sept.	305
British Columbia to aid the development of a merchant marine.....	Sept.	312
British marine in war times—Controlling it.....	May	181
British ship building—Ship dictator urged.....	Dec.	421
British ship owners affected by seamen's act.....	Sept.	317
British steamers costly.....	Jan.	30
Broderick & Bascom Rope Co.—Booklet on rope.....	Feb.	86
Bureau of foreign and domestic commerce—Report on government aid to merchant shipping.....	Aug.	285
Bureau of foreign and domestic commerce—Report on Pacific coast shipping.....	Nov.	399
Bureau of standards—Compression test of cast iron keel block.....	Oct.	343
Burr & Hardwick—Suit against Oceanic Steam Navigation Co.....	Dec.	432
Burrell & Son sell 10 "Strath" ships to Commonwealth Government line.....	Nov.	392

BOOK REVIEWS

"Alaska Coast Pilot"—Supplement to fifth edition—By coast and geodetic survey.....	Nov.	377
"Brown's Nautical Almanac" by James R. Brown.....	Dec.	436
"Coast Pilot"—New edition.....	Oct.	342
Great Lakes Red Book.....	May	174
"Heritage of Tyre", by William Brown Meloney.....	July	258
Lloyd's Register of American Yachts, by Lloyd's Register of Shipping.....	Aug.	270
"Marine and Stationary Diesel Engines", by Spon & Chamberlain.....	Jan.	38
"Marine Steam Engine", by Richard Sennett and Henry J. Oram.....	June	203
"Marine Steam Turbine", by J. W. M. Sothorn.....	Nov.	402
"Submarine Torpedo Boat", by Allen Hoar.....	Nov.	377
"Year Book of Wireless Telegraphy and Telephony", by Marconi Publishing Co.....	Jan.	38
"Year Book of Wireless Telegraphy and Telephony", by Wireless Press Ltd.....	Oct.	347
Calgary—Converted into oil tanker.....	March	102
California, Battleship—Electric propelling machinery for.....	Jan.	4
California, Battleship—Keel is laid.....	Dec.	435
Canada and Japan aid ship builders through subsidies.....	Nov.	373
Canadian Pacific liners released by British admiralty.....	Jan.	28
Canadian ship yards busy.....	Dec.	436
Canal project between Ohio river and Erie canal revived.....	June	223
Car ferry Contra Costa—Largest in the world.....	May	185
Cargo handling methods—Marine terminal design—By H. McL. Harding.....	Sept.	300
Cargo records—Grain, coal and ore.....	Feb.	70
Cargo rulings made by steamboat inspection service—Summary of.....	May	177
Carnatic Hall—Romance of.....	Oct.	360
Cars, steel—Large consignment loaded on steamer Camlake.....	Oct.	354
Cauto, steamer—Launched by Seattle Construction & Dry Dock Co.....	Nov.	372
Certificated seamen—Nationalities of.....	Aug.	271
Certificates issued to seamen, number of.....	July	250
Chains made under steam hammers—By F. G. Coburn.....	March	105
Chamberlain, E. T.—Circular on American registry for foreign ships.....	April	143
Charleston, S. C.—Opens coal traffic with South American ports.....	June	213
Chester, Pa. to have new ship building plant.....	June	220
Chicago builds triple service pier—Description of.....	March	100
Chicago Steamboat Exchange—Opens office.....	Dec.	442
China Mail Steamship Co.—New Pacific Line.....	Jan.	24
Chinese shipyards busy.....	April	134
Christmas off Cape Hatteras—By Capt. George S. Laing.....	Jan.	23
Cicoa, steamer—Electric lifting magnets handle cargo on.....	Oct.	366
City of Portland, wooden motorship—Description of.....	July	259
Clark Flexible Coupling Co.—Description of their double chain flexible coupling.....	Aug.	298
Coal movement on the Great Lakes—Table giving figures from 1905 to 1915.....	Feb.	69
Coburn, F. G.—Making chain under steam hammers.....	March	105
Colgate, James B.—Steamer founders in gale.....	Dec.	433
Collingwood Ship Building Co.—John S. Leitch, general manager.....	Oct.	346
Collisions at night—How to avoid them—By George S. Laing.....	July	235
Commandeering of vessels.....	April	157
Commerce of the Great Lakes discussed in a paper by R. Noble Wetherbee.....	May	170
Commercial Welding Co.—Apparatus for welding.....	March	121
Commissioner of Navigation—Annual report of.....	Feb.	76
Commonwealth Government Line—To operate 10 "Strath" ships taken over from Burrell & Son.....	Nov.	392
Compagnia Generale Transatlantique—Annual report shows gain in France's merchant marine since war began.....	Nov.	393

INDEX TO VOLUME XLVI—Continued

Compania Transatlantica—Regulation of line.....	Aug.	277
Compression test—Cast iron keel block.....	Oct.	343
Conference of Allies arouses interest.....	May	180
Congestion at Hongkong.....	May	182
Congress—Steamer damaged by fire.....	Nov.	377
Conners, W. J., to purchase railroad-owned package freighters.....	March	116
Contra Costa—Largest car ferry in the world.....	May	185
Cornbrooks, T. M.—Paper on "Hog and Sag of Merchant Vessels".....	Jan.	14
Cost of handling freight—How to cut it—By A. Jackson Marshall.....	Oct.	336
Costs in navy yards cut.....	Nov.	374
Cox Engineering & Tube Bending Machine Works—Pipe bending machines.....	April.	158
Cramp & Sons Ship & Engine Building Co.—Important enlargements in plant of.....	Aug.	288
Cranes installed at yard of Maryland Steel Co.—Built by Alliance Machine Co.....	Feb.	86
Crews of American vessels and British vessels contrasted.....	Sept.	305
Crosby Transportation Co. sells steamer United States.....	Dec.	418
Crosses ocean 1,100 times—Record made by Thomas Kinsey, purser.....	May	167
Cullen, Edward F.—Efficiency in Harbor Transportation.....	June	207
Cummings Ship Instrument Works—Instruments used in navigation of submarines.....	May	163
Cunard fleet growing—Consolidation of Anchor and Donaldson lines.....	Dec.	432
Cunard Line—Annual report of.....	June	208
Cunard Line buys five steamships.....	May	180
Cunard Steamship Co.—New office building.....	Aug.	277
Cutler-Hammer lifting magnets on steamer Cicca.....	Oct.	366
Daily lake freight rates—Average.....	Feb.	71
Dake Engine Co.—Steam-driven anchor windlass.....	Feb.	86
Dalton, Henry G.—Steamer launched at Lorain.....	May	189
Danziger, oil tanker—Brief description of.....	Oct.	356
Davis, E. M.—Grinding sea valves.....	July	234
Davison, G. C.—Diesel Engines for Marine Service.....	July	232
Dayton-Dick Co.—centrifugal pumps.....	April.	157
Deasy, John F.—Appointed assistant to president of Great Lakes Transit Corporation.....	Aug.	298
Decisions in maritime law.....	Feb.	78
Decisions in maritime law.....	April	148
Decisions in maritime law.....	June	206
Decisions in maritime law.....	Sept.	314
Decisions in maritime law.....	Nov.	396
Deck watches, maintaining them in port—Circular issued by Lake Carriers' Association.....	July	258
Decoration on interiors of vessels—Paper by H. B. Etter.....	Jan.	5
DeLaval Steam Turbine Co.—Reduction gears—Description of.....	Aug.	279
DeLeseps—Historic towboat rebuilt.....	June	218
Department of Commerce—Circular on emergency radio sets.....	Oct.	343
Department of Commerce makes study of navigation laws.....	April	141
Detroit and St. Mary's rivers—Lighting system of.....	April	140
Deutschland, first undersea trader—Reaches United States.....	Aug.	274
Diesel engines—Economy of.....	May	170
Diesel Engines for Marine Service—By G. C. Davison.....	July	232
Diesel engine works of New London Ship & Engine Co.....	May	184
Direct-current generating set made by Westinghouse Electric & Mfg. Co.—Description of.....	July	264
Dixon Crucible Co.—Marine paint.....	Oct.	370
Dobson, W. A.—Paper on how the dreadnought was evolved.....	Dec.	424
Dock at London—Description of new.....	Oct.	358
Donaldson and Anchor lines consolidated.....	Dec.	432
Donovan, J. J.—Discusses American merchant marine.....	Feb.	68
Draft gage and tank sounder—Description of.....	May	194
Dravo Contracting Co.—Builds tunnel-type towboat.....	Oct.	358
Dreadnought type of naval vessel—How it was evolved—Paper by W. A. Dobson.....	Dec.	424
Dry Dock of Grand Trunk Ry. at Price Rupert tested.....	Feb.	85
Dry docks at Panama—New.....	Nov.	389
Duckett & Co., A. W.—Announce new service between New York and French and Italian ports by Royal Belgian Lloyd.....	Nov.	393
Duluth harbor needs breakwater—By Alexander McDougall.....	Oct.	348
Duluth, Missabe & Northern Ry. Co. iron ore docks set record.....	Feb.	73
Dunholme—Steamer sold as junk now resold for \$850,000.....	May	172
Dunn, H. H.—Sailing Ships take the Seas Again.....	Feb.	64
Dutch-built motor ship Lara—Description of.....	June	210
Dutch shipping company, Ph. van Ommeren Corporation, opens branch offices in New York.....	Sept.	330
Dutch steamer Antwerpen sunk in North Sea.....	Nov.	400
Duthie & Co., J. F.—Construct motor-driven ferry for Seattle.....	June	221
Dyson, Captain Charles W.—To design propellers manufactured by American Manganese Bronze Co.....	Aug.	298
Dyson propellers—American Screw Propeller Co.....	Oct.	362
Dyson propellers installed by American Screw Propeller Co.....	Dec.	442
Eastland—Booklet describing raising of steamer issued by Great Lakes Towing Co.....	Feb.	85
Eastland disaster—Aftermath.....	April	142
Eastland—steamer to be bought by government.....	Jan.	28
Eckliif, James C.—Obituary.....	July	258
Educational program of Lake Carriers' Association.....	March	108
Efficiency in Harbor Transportation—By Edward F. Cullen.....	June	207
Electrical installations on vessels, specifications for.....	July	250
Electric lifting magnets used on Cicca to handle cargo of pig iron.....	Oct.	366
Electric propulsion of battleships—Paper by W. L. E. Emmet.....	Jan.	4
Electric tachometer—Description of.....	July	264
Emmet, W. L. R.—Paper on electric propulsion of battleships.....	Jan.	4
Empress of Fort William—Wrecking of steamer.....	Nov.	390
Engberg's Electric & Mechanical Works—Generating set.....	March	122
England makes after-the-war plans.....	Oct.	353
England's blockade against Germany—Explanation of method by Sir Frank Newnes.....	Oct.	351
Etter, H. B.—Paper on interior decoration of vessels.....	Jan.	5
Evans, Edward—Obituary.....	March	93
Evans, Holden A.—Elected president of Baltimore Dry Docks & Shipbuilding Co.....	July	251
Export regulations—New.....	Jan.	22

EDITORIALS

American Merchant Marine.....	Feb.	39
American Merchant Marine—A Fresh Point of View is Needed.....	June	195
American Merchant Marine—Results of the policy of meddling.....	Sept.	299

American Merchant Marine—What progress has been made in two years?.....	Oct.	335
Co-operation in Theory and Practice—Attitude of government toward shipping.....	July	231
Government ownership of merchant marine—"Can Ships Be Built Out of Air?".....	Jan.	1
Safety movement on the Great Lakes.....	Dec.	407
Seamen's act—Entertaining facts regarding its enforcement on the Great Lakes.....	March	87
Seamen's law—How it really works.....	May	159
Shipping board—Select the right men for it.....	Nov.	371
Ship purchase bill—Proposition to reestablish American maritime supremacy with sixty ships.....	April	123
Ship yards boost trade abroad.....	Aug.	265
Farr, M. E.—Becomes president of American Ship Building Co.....	Jan.	24
Fenders, suspended—Construction of.....	Oct.	354
Ferdinand & Co., L. W.—Circular on marine glue.....	Feb.	85
Ferry boat for Seattle—Motor-driven.....	June	221
Filer, barge D. L.—Founders in gale.....	Dec.	435
Fire damages steamer Congress.....	Nov.	377
Fire protection—Rules adopted by steamboat inspection service.....	Oct.	341
Fire resisting material—Bureau of standards plans development.....	Nov.	388
Fire tube superheater installation on steamer Pearl Shell.....	Aug.	298
Fire-tube superheater—Installation on tug Wyoming.....	May	194
Floating dry dock, largest in United States, to be built by Morse Dry Dock & Repair Co.....	Feb.	85
Ford, Emory L.—Freighter launched at Lorain.....	Sept.	319
Foreign-built ships admitted to American register—President suspends act of Aug. 18, 1914.....	Dec.	438
Foreign merchant ships—Notice regarding purchase of them by Americans.....	April	143
Foreign Trade Council—Offers prizes for essays on the American merchant marine.....	July	234
Foreign vessels granted American registry—List of.....	Feb.	48
Fore River Shipbuilding Corporation—Generates own oxygen.....	May	193
Fore River Shipbuilding Corporation—Launches steamer Sucrosa.....	July	253
Fore River Shipbuilding Corporation's new ship plate and angle shop—Description of.....	Aug.	293
Fore River Shipbuilding Corporation—Steamer Edward Luckenbach launched.....	Nov.	398
Fox river improvement advocated.....	April	138
France's merchant marine shows gain since beginning of war.....	Nov.	393
Freight claims—How to avoid them—By N. W. VanWyck.....	July	242
Freight handling cost—How to cut it—By A. Jackson Marshall.....	Oct.	336
Freight rates are higher—Ocean.....	Dec.	431
Freight rates curb traffic—Pacific rates so high that traffic is hampered.....	April	134
Freight ships, uniform type of construction recommended for.....	July	254
Freight tie-up in the east.....	May	183
French Trans-Atlantic Steamship Co.'s steamer Paris launched.....	Dec.	418
Fuel oil contracts.....	March	115
Furness, Withy & Co. to take over Prince line.....	Nov.	391
Gale on Lake Erie on Oct. 20—Losses in.....	Dec.	433
Garland Steamship Corporation—New organization is formed.....	May	180
Gaston, Williams & Wigmore Steamship Corporation—Organization of.....	April	131
Gatewood, Wm.—Paper on the vibration of steam vessels.....	Jan.	6
Gears, steam turbine reduction—Description of.....	Aug.	279
Generating set made by Engberg's Electric & Mechanical Works.....	March	122
Germans lose money on merchant marine.....	Jan.	29
German ships interned in American ports.....	June	209
German steamers to be used by Italy.....	Feb.	80
Government aid to merchant shipping—Report by the bureau of foreign and domestic commerce.....	Aug.	285
Government vessels to be built in private American ship yards.....	Oct.	339
Grace & Co., W. R.—Inaugurate direct steamship service between San Francisco and the West Indies.....	Sept.	330
Grace & Co., W. R.—Plan new passenger service.....	June	208
Grace & Co., W. R.—Vessels to inaugurate passenger service between Atlantic and South American ports.....	Aug.	288
Grace Steamship Co.—Organization of.....	April	131
Grain receipts at Buffalo during 1915 and 1914.....	Feb.	70
Grain trade of the Great Lakes—Table giving shipments from 1911 to 1915.....	Feb.	69
Grand Trunk dry dock at Prince Rupert tested.....	Feb.	85
Great Lakes progress during 1915—Extracts from report of Lake Carriers' Association.....	March	96
Great Lakes Protective Association—Annual meeting and report of.....	March	91
Great Lakes Protective Association—Extracts from annual report on how to lay up vessels in winter.....	March	99
Great Lakes Towing Co. issue booklet describing Wrecking operations of steamer Eastland.....	Feb.	85
Great Lakes trade for 1915 has good finish.....	Jan.	7
Great Lakes trade hampered by Seamen's law—Opening of.....	May	160
Great Lakes traffic during 1915—Summary of.....	Feb.	69
Great Lakes Transit Co.—Organization of.....	April	133
Great Northern Pacific Steamship Co. given permit to operate steamers Great Northern and Northern Pacific.....	March	117
Green, Col. E. H. R., buys steamer United States from Crosby Transportation Co.....	Dec.	418
Greenebaum, W. K.—Opens vessel brokerage office.....	Dec.	442
Griffiths & Sons, James, enter Vladivostok trade.....	April	134
Grinding sea valves—By E. M. Davis.....	July	234
Gulf storm damages ships.....	Sept.	312
Gyro-Stabilizing a Cruiser Yacht—By Elmer A. Sperry.....	Jan.	17
Hall Bros. Marine Railway & Ship Building Co. purchased by Winslow Marine Railway & Ship Building Co.....	Sept.	321
Harbor transportation—Efficiency in—By Edward F. Cullen.....	June	207
Harding, H. McL.—Modern cargo handling methods.....	Sept.	300
Hatches must be covered when vessel leaves port—Ruling of steamboat inspection service.....	Oct.	342
Havana, Cuba, gets new dock and warehouse.....	Jan.	30
Hazen, J. D., ice breaker for St. Lawrence river—Description of.....	Oct.	364
Henderson, new transport, launched.....	Aug.	288
Henley and Mayrant, destroyers—To be re-engined.....	Oct.	370
Herringbone gear—Description of.....	Aug.	279

INDEX TO VOLUME XLVI—Continued

Hoffman Co., The George William—Metal polish	April	157	Lake levels during April	June	216
How and Sag of Merchant Vessels—By T. M. Cornbrooks	Jan.	14	Lake levels during May	July	237
Holland "9"—Submarine becomes junk	April	144	Lake levels during June	Aug.	278
Holt & Co., Alfred—Become largest private ship owners	Jan.	22	Lake levels during July	Sept.	318
Hongkong—Congestion at	May	182	Lake levels during September	Nov.	389
Hudson barge line—New line planned by Witherbee, Sherman & Co., Inc.	Oct.	351	Lake levels during October	Dec.	435
Hyde Windlass Co.—Casts large bronze propellers	Dec.	442	Lake ship yards book many orders	Feb.	49
Hyde Windlass Co.—New steering gear	Dec.	442	Lake St. Clair, instructions regarding navigation on	July	254
			Lake vessel accidents during first half of 1916	Aug.	281
			Lake vessels change hands—List of sales reported	Feb.	74
Ice breaker for St. Lawrence river—Description of steamer J. D. Hazen	Oct.	364	Lake Washington canal—Salmon lock flooded	April	153
Ice breaker Nevada—Brief particulars of	April	143	Lane Life Boat Co., C. M.—Builds collapsible boat	Feb.	71
Ice machine manufactured by Peerless Ice Machine Co.	Dec.	442	Lara—Dutch-built motor ship—Description of	June	210
Inco No. 1—Steel barge—Opens traffic between St. Louis and New Orleans	May	182	Laws for measuring vessels	March	111
Inco—Self-propelling barge—First trip of	June	196	Laws governing steamship operators a handicap to them	June	214
Independent Pneumatic Tool Co.—Air tools in ship yards	Oct.	370	Laying up lake freighters	Feb.	54
Inland Navigation Co. establishes regular barge line service on Mississippi river	April	133	Laying up vessels in winter—Extracts from report of Great Lakes Protective Association	March	99
Inland Navigation Co.'s barge Inco—Makes first trip	June	196	Lehigh Valley Railroad Co.—Injunction suit dissolved	July	248
Insurance, marine—Origin of	Dec.	417	Lehigh Valley Railroad gets new motor boat	Sept.	330
Interior decoration of vessels—Paper by H. B. Etter	Jan.	5	Leitch, John S.—Sketch of	Oct.	346
International Mercantile Marine Co. taken over by American International Corporation	June	210	Lifeboat men to be examined	Jan.	22
International Oxygen Co.—Installs new plant at College Point, L. I., N. Y.	Sept.	334	Life buoys—Circular on the subject issued by steamboat inspection service	Sept.	321
Interstate commerce commission grants permission for operation of Great Northern and Northern Pacific	March	117	Life preserver—McGiff luminous belt	June	230
Interstate commerce commission—Lehigh Valley Railroad injunction suit dissolved	July	248	Life preservers—Robinson-Rodgers Co. type	June	230
Interstate commerce commission—Results of investigation on railroad ownership of water carriers	July	258	Light at Boston—200 years old	Nov.	389
Iron ore cargo—Average	Feb.	70	Lighthouse bureau makes changes in harbor lights at Sheboygan	July	242
Iron ore docks of Duluth, Missabe & Northern Ry. set record	Feb.	73	Lighthouse service issues list of aids to navigation on Great Lakes and St. Lawrence river	July	258
Iron ore on Lake Erie docks May 1	June	222	Light station at Cape St. Elias, Alaska—New	Nov.	388
Iron ore receipts at Lake Erie ports during November, 1915	Jan.	15	Lighting Detroit and St. Mary's rivers	April	140
Iron ore receipts at Lake Erie ports during May	July	234	Lights, emergency—Storage battery for	May	176
Iron ore receipts at Lake Erie ports during June	Aug.	284	Lime trade—Perils of the—By David A. Wasson	Oct.	361
Iron ore receipts at Lake Erie ports during July	Sept.	316	Livestock channel—Semaphore signals used in	May	186
Iron ore receipts at Lake Erie ports during August	Oct.	340	Lloyd Royal Belge line—Inaugurates new service between New York and French and Italian ports	Nov.	393
Iron ore receipts at Lake Erie ports during September	Nov.	378	Load line regulations—Conference held at office of Secretary Redfield of department of commerce	Nov.	387
Iron ore receipts at Lake Erie ports during October	Dec.	416	Load lines—Conference on	Oct.	342
Iron ore shipments during November, December and season of 1915	Jan.	13	Locomotive Superheater Co.—Installs fire tube superheater on steamer Pearl Shell	Aug.	298
Iron ore shipments during April	June	222	London & Northern Steamship Co., Ltd.—Purchased by Pyman, Watson & Co., Ltd.	Nov.	392
Iron ore shipments during May	July	234	London dock—Description of new	Oct.	358
Iron ore shipments during June	Aug.	284	Lorain plant of American Ship Building Co.—Improvements at	Dec.	432
Iron ore shipments during July	Sept.	313	Los Angeles—Report of harbor commissioners of	June	217
Iron ore shipments during August	Oct.	340	L-6, submarine—Launched	Dec.	418
Iron ore shipments during September	Nov.	377	Luckenbach, Edward—Brief description of new steamer	Nov.	398
Iron ore shipments during October	Dec.	416	Luckenbach line charters its vessels	May	181
Iron ore traffic on Great Lakes—Tables giving shipments, receipts at Lake Erie and Lake Michigan ports, and amount on dock Dec. 1 at Lake Erie ports	Feb.	70	Lumber carriers of American-Hawaiian steamship line make initial trips	Oct.	352
Iron ore unloaders—Pittsburgh & Conneaut Dock Co. transport them by water	May	178			
Islerwood system of construction—Report on number of vessels building in United States	March	121	McDougall, Alexander—Duluth harbor needs breakwater	Oct.	348
Italian steamer Milazzo—Unique cargo carrier	Aug.	290	McDougall, Captain Alexander—Builder of whaleback type of steamer	Nov.	378
Italy takes steamers	Feb.	71			
Italy to use German steamers	Feb.	80	McEntee, Wm.—Portions of his paper on "The Variation in Frictional Resistance of Ships with Condition of Wetted Surface"	Jan.	3
			McGiff luminous life belt	June	230
Japan and Canada aid ship builders through subsidies	Nov.	373	McKibben, Frank P.—Developing Philadelphia's harbor	April	149
Japan's merchant marine growing steadily	Nov.	400	McNab Co.—Whistle control	Oct.	370
Japanese company buys American ships Korea and Siberia	July	241	McNab Co.—Willett-Bruce whistle control	March	122
Japanese control Pacific trade	Sept.	329			
Japanese ship building activities	Aug.	277	Magnets, electric lifting—Used to handle pig iron cargo on freighter Cicca	Oct.	366
Japanese ship building activities	Oct.	357	Mallory, Henry R.—New steamer launched	Nov.	398
Japanese ship yards—Shortage in building materials	Dec.	436	Manitowoc Shipbuilding & Dry Dock Co.—Builds Norwegian craft	April	158
Japanese steamer Siberia, formerly American vessel re-enters Pacific trade	Sept.	330	Manning, Capt. Albert R.—Obituary	Jan.	13
Japanese steamship lines—Why they make money	April	144	Marine cadet school urged	June	225
Japanese tramp steamers and Japanese shipping activities	Aug.	271	Marine Electrical Co.—Description of tank sounder and draft gage	May	194
Japanese vessels built with government subsidy	April	127	Marine insurance—Origin of	Dec.	417
Japanese yard, Mitsu Bishi Dockyard & Engine Works, shows big increase	Aug.	288	Marine paints—Joseph Dixon Crucible Co.	Oct.	370
			Marine patents—List of late	Jan.	20
Keel block, cast iron—Compression test made	Oct.	343	Marine patents—List of late	May	167
Kerr, D. G.—Bulk freighter launched at Lorain	June	219	Marine patents—List of late	June	222
Kinsey, Thomas—Crosses ocean 1,100 times	May	167	Marine patents—List of late	Oct.	358
Kitsap II—Fast steamer for Puget Sound	June	213	Marine patents—List of late	Dec.	435
Korea and Siberia—Steamers sold to Japanese company	July	241	Marine terminal design and cargo handling methods—By H. McL. Harding	Sept.	300
			Marine Use of Superheated Steam—By Henry B. Oatley	June	198
Labor shortage in ship yards	Feb.	59	Maritime law—See Decisions in maritime law		
LaFollette seamen's act—Analysis of situation faced by British ship owners	Sept.	317	Marshall, A. Jackson—How to cut freight handling cost	Oct.	336
LaFollette seamen's act—Some of its inconsistencies in relation to Great Lakes trade	Jan.	16	Maryland Steel Co. installs large ship yard cranes	Feb.	86
Laing, George S.—Article on anchor maneuvers	Nov.	382	Matanzas—Story of her foundering—By David A. Wasson	Nov.	395
Laing, George S.—Christmas off Cape Hatteras	Jan.	23	Mayrant and Henley, destroyers—To be re-engined	Oct.	370
Laing, George S.—How to avoid collisions at night	July	235	Measuring vessels—Laws for	March	111
Laing, George S.—How to steer a ship	Oct.	362	Men employed in American vessels—Number of	May	177
Laing, George S.—Trading beyond the arctic circle	May	171	Merchant marine—American—Additions to	Aug.	297
Lake-built Norwegian steamer—Description of	Aug.	287	Merchant marine of Frahee shows gain since beginning of war	Nov.	393
Lake Carriers' Association adopt new wage schedule	May	173	Merchant marine of Japan is growing steadily	Nov.	400
Lake Carriers' Association—Annual meeting of	March	88	Merchant marine of the United States employs 188,000 men	May	177
Lake Carriers' Association assembly rooms opened	Feb.	59	Merchant marine of the world reduced 50 per cent through war	Oct.	349
Lake Carriers' Association—Educational program of	March	108	Merchant marine to be developed by British Columbia	Sept.	312
Lake Carriers' Association—Excerpt from its Bulletin giving advice to new men on shipboard	July	257	Merchant shipping, government aid to—Report by the bureau of foreign and domestic commerce	Aug.	285
Lake Carriers' Association—Extracts from report showing progress on Great Lakes during 1915	March	96	Merchant ships sunk in war operations	March	112
Lake Carriers' Association increases wage scale of unlicensed men	Sept.	313	Merchant vessels sunk as result of European war—Summary of	Nov.	401
Lake Carriers' Association—Issues bulletin on maintaining deck watches in port	July	258	Merchant vessels sunk in war—Most of them lie in shallow water and may be salvaged	Oct.	338
Lake Carriers' Association—School for engineers	Oct.	359	Merida—Steamer founders in gale	Dec.	433
Lake Carriers' Association—Welfare results on the Great Lakes	March	97	Mexico—Condition of her shipping industry	Aug.	284
Lake Erie-Ohio River canal revived	June	223	Milazzo, Italian freighter—Has unusual cargo handling equipment	Aug.	290
Lake freight rates—Average daily	Feb.	71	Mississippi river barge Inco—Makes first trip	June	196
Lake levels during November, 1915	Jan.	26	Mississippi river barges—Regular barge line to be established	April	133
			Mitsu Bishi Dockyard & Engine Works, Japan—Growth of yard	Aug.	288
			Mjelde, Johan—Description of steamer	Aug.	287
			Moore & Scott Iron Works—Work under way at their plant	April	157
			Moreland, W. C.—After end of wrecked steamer towed to Superior shipyard and rebuilt	Aug.	266
			Moreno and Rivadavia—Battleships—Accepted by Argentine government	May	174

INDEX TO VOLUME XLVI—Continued

Morgan line—New Orleans controversy	March	93	Parrott, Joseph A.—Car ferry launched at Philadelphia	Nov.	397
Morris Machine Works—Marine engines	Sept.	334	Patents—Late marine	Jan.	20
Morse Dry Dock & Repair Co. to build largest sectional floating dry dock in the country	Feb.	85	Patents—Late marine	May	167
Motor boat for Lehigh Valley railroad	Sept.	330	Patents—Late marine	June	222
Motor-driven ferry for Seattle—Description of	June	221	Patents—Late marine	Oct.	358
Motor ship Lara—Description of	June	210	Patents—Late marine	Dec.	435
Moving big ore unloaders by water	May	178	Peerless Ice Machine Co.—Automatic ice machine	Dec.	442
Munamar—New steamer placed in commission	Feb.	68	Pendleton, Fields S.—New type of schooner to be built	June	220
Municipal pier at Chicago—Description of new	March	100	Peninsula & Occidental Steamship Co.—Terminal dock and warehouse opened at Havana, Cuba	Jan.	30
National Foreign Trade Council—Campaign for trade supremacy	March	103	Peninsular & Oriental Steam Navigation Co. to take over the New Zealand Shipping Co.	Nov.	302
National Foreign Trade Council—Report tells what is needed to vitalize American shipping	July	243	Peninsula Ship Building Co.—Plant organized for construction of wooden vessels	Oct.	357
National Ox-Hydric installs oxygen plant at yard of Fore River Shipbuilding Corporation	May	193	Penn Marine & Ordnance Castings Co., Inc.—New company formed	June	226
Naval construction—Summary of	Nov.	399	Pennsylvania—Battleship—Report of standardization trials of	April	125
Naval Problems and Preparedness—Paper by Capt. A. P. Niblack	Jan.	10	Pennsylvania, new superdreadnought, commissioned	July	255
Naval program—Bids opened	Dec.	437	Pennsylvania Shipbuilding Co.—New corporation formed	April	158
Naval vessels building for the United States—Table of	Feb.	48	Pennsylvania Ship Building Co.—New plant nearing completion	Dec.	420
Naval vessels—Dreadnought type—Evolution of	Dec.	424	Penton, Henry—How Ships Act on Backing Trials	Jan.	27
Navigation laws—Report issued by Department of Commerce	April	141	Pere Marquette Line Steamers—Find seamen's law burdensome	Jan.	26
Navy department to re-equip some vessels now equipped with turbines	Oct.	370	Philadelphia & South American Steamship Corporation—Will operate freight steamship line between Philadelphia and South American ports	Nov.	393
Navy will add 157 vessels in three years	Oct.	339	Philadelphia's harbor—Developing	April	149
Navy yard costs cut	Nov.	374	Philippine Islands—Trade routes changed	April	140
Nebraska and Nevada sold by American-Hawaiian Steamship Co.	March	115	Ph. van Ommeren Corporation opens branch office in New York	Sept.	330
Nesbitt, George Edward—Biography of	Feb.	65	Pintch gas buoys and range lights on Great Lakes	April	140
Neutral shipping suffers heavily in 20 months of European war	May	183	Pipe bending machine—Description of	April	158
Nevada—Steamer—Brief particulars of	April	143	Pittsburgh & Conneaut Dock Co. transport big ore unloader by water	May	178
New London Ship & Engine Co.—Largest American Diesel engine works	May	184	Plate shortage delays construction of ships	Nov.	397
Newnes, Sir Frank—Explanation of England's method of carrying on blockade against Germany	Oct.	351	Pleiades—Steamer opens coal traffic between Charleston, S. C. and South American ports	June	213
New Orleans controversy over Morgan line	March	93	Pneumatic tools in ship yards	Oct.	379
Newport News Ship Building & Dry Dock Co. launch steamer Henry R. Mallory	Nov.	398	Pneumator Co.—Installations of tank measuring equipment	March	121
New York & Western Canal Line Inc.—Plan new barge line for Witherbee, Sherman & Co., Inc.	Oct.	351	Poppet-valve engines—Nordberg Mfg. Co.	Sept.	334
New York barge canal—Forms great connecting link to other waterways	Dec.	430	Port labor defined by Secretary Redfield	July	236
New Zealand Shipping Co. to be taken over by Peninsular & Oriental Steam Navigation Co.	Nov.	392	Portland, Ore.—Subsidy approved at meeting	Oct.	352
Niblack, Capt. A. P.—Paper on "Preparedness and Naval Problems"	Feb.	10	Portsmouth—Frigate—Alleson in patriotism	April	144
Nielsen, Niels—Launched at yard of Skinner & Fddy Corporation	Nov.	372	Porter, reason for rapid development of American	July	249
Nikolaievsk—Russian port—Opened to commerce	May	186	Potter Transportation Co.—New organization	May	182
Nordberg Mfg. Co.—Poppet-valve engines	Sept.	334	Power life boats advocated	Aug.	267
North Truro, Mass. radio station	June	215	Preparedness and Naval Problems—By Capt. A. P. Niblack	Jan.	10
Norwegian fleet—New	Dec.	437	Prince line to be taken over by Furness, Withy & Co.	Nov.	391
Norwegian steamer Johan Mjelle—Description of	Aug.	287	Prison ship success	March	102
Norwegian steamer Niels Nielsen launched	Nov.	372	Propellers, Dyson type—To be manufactured by American Manganese Bronze Co.	Aug.	298
Nova Scotia Steel & Coal Co.—Increases capitalization	June	230	Propellers, large bronze—Cast by Hyde Windlass Co.	Dec.	442
Oatley, Henry B.—Paper on Marine Use of Superheated Steam	June	198	Protection for American vessels	Jan.	21
Ocean freight rates are higher	Dec.	431	Providence channel completed	June	216
Oceanic Steam Navigation Co.—Suit brought against company by Burr & Hardwick	Dec.	432	Puget Sound steamer Kitsap II	June	213
Ohio river-Lake Erie canal revived	June	223	Purdie, T. Paterson—Booklet on "Time Charters of British Cargo Steamers"	Feb.	81
Ohio river traffic awaits improvement	April	145	Pyman, Watson & Co., Ltd. purchase London & Northern Steamship Co., Ltd.	Nov.	392
Oil-burning vessels—New regulations governing them	June	217	Quebec bridge disaster	Nov.	379
Oil dispelling fog—Experiments of E. K. Roden	Jan.	34	Radio affairs—Report on	Feb.	76
Oil engine—Bolinders type	Nov.	406	Radio installations on vessels	April	139
Oil tanker Danziger is well equipped	Oct.	356	Radio sets, emergency—Circular by department of commerce	Oct.	343
Opening of navigation on the Great Lakes disturbed by Seamen's law	May	160	Radio station at North Truro, Mass.	June	215
Oregon Ship Building Co.—New organization formed	Dec.	421	Railroad-owned vessels to be taken over by new company	March	116
Ore—See iron ore			Rainwater Lumber Co.—Establish new steamship line between New Orleans and Cristobal	Nov.	394
Ore unloader transported by water by Pittsburgh & Conneaut Dock Co.	May	178	Rapurel Steamship Co., new West Indian line established by	July	255
Osborn & Co., T. L.—Takes over business of F. H. Osborn & Co.	July	260	Raymond, Joseph S.—Obituary	May	164
Osborne, T.—Description of tunnel steamer for tropical river	Dec.	420	Raymond releasing device for boats—Description of	July	264
Osceola—Interesting repair job on steamer	Feb.	66	Raymond releasing gear	Feb.	85
Ostrander Shipping Co., H. F.—New organization	May	172	Record made by Thomas Kinsey in crossing ocean 1,100 times	May	167
Ottawa, new gasoline ferry tender	Sept.	318	Record set by Duluth, Missabe & Northern Ry. Co.'s iron ore docks	Feb.	73
Outside courses on the Great Lakes—Advocated by Lake Carriers' Association	Sept.	308	Records in loading and unloading lake vessels	Feb.	70
Oxy-acetylene torch used in cutting in two the steamer L. V. Stoddard	Aug.	294	Record in ore, coal and grain cargoes	Feb.	70
Pacific-Alaska Navigation Co. and Pacific Coast Steamship Co. are merged	Nov.	395	Redfield, Wm. C., secretary of commerce—Conference on leadline	Oct.	342
Pacific & Eastern Steamship Co.—Organization of	Jan.	29	Redfield, Wm. C.—Defines port labor with reference to seamen's law	July	236
Pacific coast shipping—Report of bureau of foreign and domestic commerce	Nov.	399	Reduction gears, steam turbine—Description of	Aug.	279
Pacific coast ship yards, schooners under construction in	July	256	Refrigerating machine manufactured by Westinghouse Machine Co.	Jan.	38
Pacific Coast Steamship Co. and Pacific-Alaska Navigation Co. are merged	Nov.	395	Reiss, John P.—Obituary	Sept.	316
Pacific coast trade—Summary of 1915 operations	Feb.	52	Repair job on steamer Osceola interesting	Feb.	66
Pacific coast yards launch two vessels	Nov.	372	Republic, new German steamer Walkure—Last cruise of	Dec.	416
Pacific freight rates so high that traffic is hampered	April	134	Republic—Raising sunken steamer	Jan.	32
Pacific Mail Steamship Co. purchased by The American International Corporation	Feb.	81	Resistance of Ships—Papers by E. H. Rigg and Wm. McEntee	Jan.	3
Pacific Mail Steamship Co.'s steamers returned to Pacific trade by their new owner, American International Corporation	Sept.	316	Resistance of Ships—Recent studies of—By Ernest H. Rigg	May	165
Pacific Mail Steamship Co. vessels re-enter trans-Pacific trade	Oct.	350	Richardson fleet—Promotions in	April	153
Package freight lines may be consolidated into new company	March	116	Rigg, E. H.—Portions of his paper on "Determination of the Resistance of Ships"	Jan.	3
Pacific trade controlled by Japanese	Sept.	329	Rigg, Ernest H.—Paper on Recent studies of ship resistance	May	165
Paddleford, George E.—Steamer launched	June	220	Rigging of a modern freighter—Arrangement of	July	253
Panama canal act—Petition for reopening of Lake line case denied	Jan.	30	Rineck Cordage Co.—Booklet on rope	Feb.	85
Panama canal—Draft of ships passing through	Oct.	343	Rivadavia and Moreno—Battleships—Accepted by Argentine government	May	174
Panama canal—Government has worked out system for convenience of ship masters	Oct.	365	River barge line opened between St. Louis and New Orleans by barge line	May	182
Panama canal—New orders issued regarding operation of	Dec.	438	River improvement advocated between Fox lake and Aurora, Ill.	April	138
Panama canal others to have new office building	Feb.	77	River traffic awaits improvement	April	145
Panama canal reopened after seven months	June	216	Robins Dry Dock & Repair Co.—Steamer L. V. Stoddard cut in two with oxy-acetylene torch	Aug.	294
Panama canal route—Time saved by	May	185	Robinson, Lieut. S. M.—Paper on Ward boiler test	Aug.	268
Panama canal slide—Rapid progress made in clearing it up	Jan.	32	Robinson-Roder Co.—Life saving equipment	June	230
Panama canal tolls, maintenance costs and deficit	July	250	Roden, E. K.—Experiments with oil for dispelling fog at sea	Jan.	34
Panama canal—Vessel agents at—Article from Fairplay giving English viewpoint	April	130	Roller-Smith Co.—Storage battery bulletin	Jan.	38
Panama—Motor ship—Carries oil	Jan.	13	Routes to Philippine islands changed	April	140
Panama—New dry docks at	Nov.	389	Royal Belgian Lloyd establishes new service between New York and French and Italian ports	Nov.	393
Panama—Progress of work on Pacific terminals at	May	176	Ruby—Power schooner—Sails for Bering sea after making repairs	May	189
Paris, quadruple turbine liner—Launched for French Trans-Atlantic Steamship Co.	Dec.	418	Rules for measuring vessels	March	111
			Russian port of Nikolaievsk opened to commerce	May	186
			Russian waterways' traffic to be controlled by committee	May	184

INDEX TO VOLUME XLVI—Continued

Safety first exposition at Washington—Interesting exhibits at	April	139	Standard Oil Co. buys vessels under construction at Toledo	April	158
Sailing ships take the seas again—By H. H. Dunn	Feb.	64	Standard Oil Co.'s auxiliary schooners, building by Toledo Ship Building Co.—Description of	Dec.	408
Sales of several foreign steamship lines	Nov.	391	Standard Shipbuilding Corporation—New organization	Feb.	71
Salmon bay lock opened	April	153	Standard Shipbuilding Corporation—Will enlarge plant	Nov.	373
Scandinavian steamship lines—Activities of	June	218	Steamboat inspection rulings—Summary of	June	215
Schermerhorn, S. G.—Advocates government aid to American merchant marine	May	177	Steamboat inspection service adopts rule for fire protection	Oct.	341
School for engineers—Conducted by Lake Carriers' Association	Oct.	359	Steamboat inspection service—Changes rule governing service on motor-propelled light vessels	Oct.	363
Schooners for Standard Oil Co. building by Toledo Ship Building Co.—Description of	Dec.	408	Steamboat inspection service—Grants re-examinations	Dec.	438
Scout—New motor boat built for Lehigh Valley railroad	Sept.	330	Steamboat inspection service issues circular on life buoy requirements	Sept.	321
Scully Steel & Iron Co.—Valves for marine work	Nov.	406	Steamboat inspection service—Issues new regulation for oil-burning vessels	June	217
Seaford Marine Railway & Shipbuilding Co. to enlarge plant	June	220	Steamboat inspection service lowers age limit for marine licenses	May	177
Seamen, number of certificates issued to	July	250	Steamboat inspection service makes cargo rulings	May	177
Seamen's act—Amendment urged	June	215	Steamboat inspection service—Number of certificates issued to seamen	July	250
Seamen's act applied to foreign ships	Oct.	341	Steamboat inspection service—Ruling covering area of steel boiler plate	Oct.	343
Seamen's act—Its effect on England	Sept.	317	Steamboat inspection service—Ruling governing hatch covers	Oct.	342
Seamen's bill—Its effect on Pacific coast trade	Sept.	329	Steamboat inspection service—Ruling on fusible plugs	Oct.	343
Seamen's law—Its provisions prove burdensome to small boat owners	Jan.	26	Steamboat inspection service—Ruling relating to transportation of certain articles on vessels carrying passengers	Dec.	438
Seamen's law—Restricting Great Lakes trade	May	160	Steamboat inspection service—Specifications for electrical installations	July	250
Seamen's law—Section referring to port labor defined by Secretary Redfield	July	236	Steamboat inspection service wants larger power	Feb.	75
Seamen who obtained certificates—Nationalities of	Aug.	271	Steamship companies organized—Two new	April	131
Seattle completes unique terminal on Bell street—Description of	Feb.	79	Steamship line established between San Francisco and West Indies by W. R. Grace & Co.	Sept.	330
Seattle Construction & Dry Dock Co. taken over by Todd Shipyards Corporation	Sept.	320	Steamship lines are sold—Several foreign	Nov.	391
Seattle lock opened	April	153	Steamship lines—New service inaugurated by several different lines	Nov.	393
Seattle to have new motor-driven ferry	June	221	Steamship line to operate between New York, India and Africa to be established	June	217
Sedgwick, Joseph A.—Obituary	June	225	Steam turbine reduction gears—Description of Herringbone gear	Aug.	279
Semaphore signals in Livingstone channel	May	186	Steer a Ship, How to—By Capt. George S. Laing	Oct.	362
Sewall shipyards leased by The Texas Co.	Aug.	288	Steering gear—Electro-hydraulic type	Dec.	442
Shallow draft steamers—Description of	Dec.	420	Stoddard, L. V.—Steamer cut in two by oxy-acetylene torch	Aug.	294
Sheadle, J. H.—Obituary	Nov.	386	Stone, Harry—Tribute paid to him at meeting of Lake Carriers' Association	March	90
Sheadle, J. H.—Welfare results on the Great Lakes	March	97	Storm on coast of Gulf of Mexico causes heavy damage	Sept.	312
Shepherd, C. H.—Story of how steamer Empress of Fort William was wrecked	Nov.	390	Storm on Lake Erie—Losses in	Dec.	433
Sheriffs Mfg. Co.—Testimonial regarding propeller wheel installed by company on steamer Gogebic	Sept.	334	Stratton, E. Platt, on uniform type of construction for freight ships	July	254
Ship Brake Tests in a Model Tank—By Capt. Wm. Strother Smith	Jan.	25	Submarine Holland "9" becomes junk	April	144
Ship builders are rushed	Jan.	30	Submarine L-6 launched by California Shipbuilding Co.	Dec.	418
Ship builders of Brazil aided by government	Nov.	398	Submarines—Instruments used in navigating them	May	163
Ship building activities all over the world—Brief summary of	Oct.	357	Subsidies to shipping planned by Japan and Canada	Nov.	373
Ship building activities during 1915—Summary of	Feb.	40	Subsidy approved by Portland, Ore.	Oct.	352
Ship building activities in American yards	Feb.	47	Success—Prison ship	March	102
Ship building activities on Atlantic coast	Jan.	7	Sucroza, new steamer—Description of	July	253
Ship building activities on the Great Lakes	April	142	Suffolk, steamer—Chartered for five years at high price	Nov.	378
Ship building activity in American yards—Summary of	May	187	Summary of Pacific coast shipping during 1915	Feb.	52
Ship building activity in the United States—Returns to the bureau of navigation	Aug.	289	Sun Co. to build plant at Chester, Pa.	June	220
Ship building in American yards leads over British output	July	257	Superheated Steam—Marine Use of—By Henry B. Oatley	June	198
Ship building in American yards on October 1, 1916	Dec.	436	Superheater installation on steamer Pearl Shell	Aug.	298
Ship building in American yards summarized	June	220	Superheater—Marine fire-tube—Installed on tug Wyoming	May	194
Ship building in Canadian yards	Dec.	436	Survey vessels' signals	Oct.	358
Ship building in coast and lake yards—Tables giving vessels built during 1915 and contracts on hand Jan. 1, 1916	Feb.	43	Survey work of U. S. coast and geodetic survey retarded by lack of funds	Aug.	286
Ship building in Japan during fiscal year ending March 31, 1916	Aug.	277	Tank Ship Building Corporation—Work at yard of	Dec.	419
Ship building in United States ranks first compared with other nations—Comparative data on same	Sept.	322	Tank sounder and draft gage—Description of	May	194
Ship building on the Great Lakes	Feb.	49	Tank steamer Texas launched	June	226
Ship building record for two years—American	Aug.	278	Taylor & Sanderson Shipping Co.—Proposed sale of fleet	Nov.	392
Ship dictator wanted in England	Dec.	421	Terminal design and cargo handling methods—By H. McL. Harding	Sept.	300
Shipping bill—Complete text of	March	109	Texas Co. leases Sewall shipyards	Aug.	288
Shipping bill expected to pass	Sept.	315	Texas—Tank steamer—Launched	June	226
Shipping conditions after the war	Feb.	67	Tietjen & Lang Dry Dock Co.—Purchased by syndicate and will be managed by William H. Todd	July	257
Shipping conditions after the war—Nations prepare for them	July	240	Time saved by Panama canal	May	185
Shipping on the gulf of Mexico suffers heavy damage in storm	Sept.	312	Time spent in port by lake vessels—Average	Feb.	70
Shipping on the Pacific—Report of bureau of foreign and domestic commerce	Nov.	399	Tobin bronze—American Brass Co.	Nov.	406
Shipping regulations considered by Australian naval authorities	Nov.	394	Todd Shipyards Corporation—Formation of	Aug.	288
Ship plate and angle shop of Fore River Shipbuilding Corporation—Description of new	Aug.	293	Todd Shipyards Corporation—Officers and organization of	Sept.	334
Ship purchase bill is on the ways	April	124	Todd Shipyards Corporation—Takes over property of Seattle Construction & Dry Dock Co.	Sept.	320
Ship purchase bill strikes many snags	May	175	Todd, William H.—Will manage Tietjen & Lang property acquired by syndicate	July	257
Ship resistance—Studies of—By Ernest H. Rigg	May	165	Toledo Ship Building Co.—Description of auxiliary schooners building at yard of	Dec.	408
Ships are sold at auction at New York	June	197	Tongking—Large motor ship	Jan.	15
Ships interned in American ports—German	June	209	Tonnage destroyed in European war—Merchant—Summary of	Nov.	401
Ships lost in war—Summary of	Nov.	401	Towboat DeLesseps rebuilt	June	218
Ships—Neutral—Lost in 20 months of European war	May	183	Towboat of tunnel type built by Dravo Contracting Co.	Oct.	358
Ships on Backing Trials—How they act—By Henry Penton	Jan.	27	Towing record made by S. O. Co. No. 95—Covers 75,000 miles in tow of steamer Richmond	Nov.	402
Ship yards need men	Feb.	50	Toyo Kisen Kaishiki Kaisha—Purchases steamers Korea and Siberia	July	241
Shipyards revived—Old	March	117	Trade routes to Philippine Islands changed	April	140
Siberia and Korea—Steamers sold to Japanese company	July	241	Trade war predicted at end of European war	Nov.	391
Siberia, steamer—Re-enters Pacific trade under Japanese flag	Sept.	330	Trading beyond the Arctic Circle—By Capt. George S. Laing	May	171
Signals of survey vessels	Oct.	358	Traffic on the Great Lakes during 1915—Summary of	Feb.	69
Smith, Capt. Wm. Strother—Paper on Ship Brake Tests in a Model Tank	Jan.	25	Training schools for merchant marine cadets urged	June	225
Smith, Edward—Obituary	Jan.	20	Transatlantic line between Finland and United States to be established	June	226
S. O. Co. No. 95, barge—Towed 75,000 miles, establishing record	Nov.	402	Transatlantic Steamship Co.—To establish line between New York, India and Africa	June	217
Society of Naval Architects and Marine Engineers—Annual meeting of	Jan.	2	Transport Henderson launched	Aug.	288
Soo canal report of Lake Superior commerce	Jan.	15	Tugs—Ocean type—are carthorses of deep sea commerce	Jan.	33
Soo canal report of Lake Superior commerce for 1914 and 1915	Feb.	69	Tunnel steamer for tropical river—By T. Osborne	Dec.	420
Soo canal report of Lake Superior commerce	June	217	Tunnel type towboat built by Dravo Contracting Co.	Oct.	358
Soo canal report of Lake Superior commerce	July	237	Turbine liner Paris launched for French Trans-Atlantic Steamship Co.	Dec.	418
Soo canal report of Lake Superior commerce	Aug.	271	Ulysses and Achilles, colliers—Data regarding tests showing sag of vessels at different stages of loading	Jan.	14
Soo canal report of Lake Superior commerce	Sept.	313	Union Iron Works purchases plant of United Engineering Works	March	115
Soo canal report of Lake Superior commerce	Nov.	373	United Fruit Co.—Absorbed by American International Corporation	June	210
Soo canal report of Lake Superior commerce	Dec.	417	United States bureau of standards—Compression test of cast iron keel block	Oct.	343
Southern Pacific—Morgan line controversy	March	93	United States Coast and Geodetic Survey—Annual report of	Feb.	77
Spain limits foreign participation in Spanish maritime enterprises	Nov.	402	United States Coast and Geodetic Survey plans work for coming season	May	177
Spanish steamship line established between Vigo and New York	July	242			
Spanish steamship line—Regulation of	Aug.	277			
Specifications for electrical installations on vessels	July	250			
Sperry, Elmer A.—Paper on Gyro-Stabilizing a Cruiser Yacht	Jan.	17			
Standardization in construction of freight vessels advocated by E. Platt Stratton	July	254			
Standardization of ships supported by senate finance committee and house committee on merchant marine	Sept.	315			
Standardized ships to be built by new company at Chepstow, River Wye, England	Sept.	320			
Standard Oil Co. buys steamer Dunholme for \$850,000	May	172			